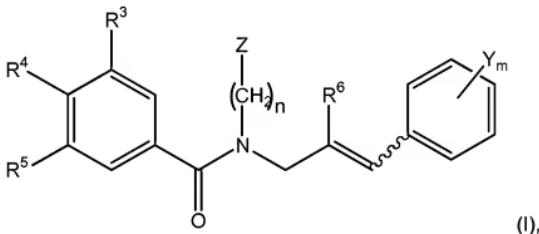


I. Listing of Claims

Please amend the claims as follows (the changes in these claims are shown with ~~strikethrough~~ for deleted text and underlines for added text). A complete listing of the claims is listed below with proper claim identifiers. This listing of claims will replace all prior versions, and listings, of claims in the application.

What is claimed is:

1. (Currently Amended) A modulator of the structure (I), or a salt thereof:



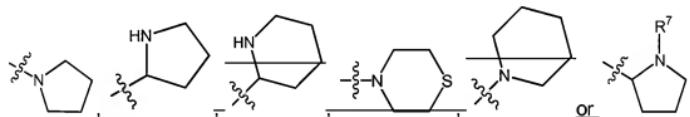
where m is an integer from 1 to 5;

each Y is independently selected from the group consisting of hydrogen, halogen, -CN, -NO₂, -OH, -OR', -C(O)R', -CO₂R', -O(CO)R', -C(O)NR'R'', -OC(O)NR'R'', -SR', -SOR', -SO₂R', -SO₂NR'R'', -NR'R'', -NR'C(O)R'', -NR'C(O)₂R'', -NR'SO₂R'', -NR'(CO)NR''R'', unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₃₋₈ cycloalkyl, and unsubstituted or substituted C₆₋₁₀ aryl; ~~unsubstituted or substituted 5 to 10 membered heteroaryl, and unsubstituted or substituted 3 to 10 membered heterocyclyl;~~

where each R', R'' and R''' are each independently from the group consisting of:
hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, and
unsubstituted or substituted C₆₋₁₀ aryl, unsubstituted or substituted 5- to
10-membered heteroaryl, and unsubstituted or substituted 3- to 10-
membered heterocyclyl;

n is 0, 1, 2 or 3;

Z is a substituted or unsubstituted group of the formulae:



where R⁷ is selected from the group consisting of hydrogen, -C(O)R', -CO₂R', -C(O)NR'R'', -SO₂R', unsubstituted or substituted C₁₋₁₀ alkyl, unsubstituted or substituted C₁₋₈ alkoxy, unsubstituted or substituted C₂₋₁₀ alkenyl, unsubstituted or substituted C₂₋₁₀ alkynyl, unsubstituted or substituted C₃₋₁₀ cycloalkyl, unsubstituted or substituted C₆₋₁₀ aryl, and C₆₋₁₀ aryloxy, where each R', R'' and R''' are each independently from the group consisting of: hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, and unsubstituted or substituted C₆₋₁₀ aryl;

R⁶ is alkyl, hydrogen, or halogen; and

R³, R⁴, and R⁵ are each independently selected from the group consisting of hydrogen, halogen, -CN, -NO₂, -OH, -OR', -C(O)R', -CO₂R', -O(CO)R', -C(O)NR'R'', -OC(O)NR'R'', -SR', -SOR', -SO₂R', -SO₂NR'R'', NR'R'', -NR'C(O)R'', -NRC(O)₂R'', -NR'SO₂R'', -NR'(CO)NR'R'', unsubstituted or substituted C₁₋₈ alkyl, unsubstituted or substituted C₂₋₈

alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₃₋₈ cycloalkyl, and unsubstituted or substituted C₆₋₁₀ aryl, unsubstituted or substituted 5— to 10-membered heteroaryl, and unsubstituted or substituted 3— to 10-membered heterocyclyl, or where any two of R₃, R₄ or R₅ together with the atoms which they substituted form a substituted or unsubstituted 3— to 10-membered heterocyclyl.

2. (Previously Presented) The modulator of claim 1, where R⁶ is hydrogen.

3. (Previously Presented) The modulator of claim 1, where R⁶ is substituted or unsubstituted C₁₋₈ alkyl.

4. (Previously Presented) The modulator of claim 1, where R⁶ is halogen.

5. (Previously Presented) The modulator of claim 1, where R³, R⁴, and R⁵ are each independently selected from the group consisting of hydrogen, -OR', and substituted or unsubstituted C₁₋₈ alkyl.

6. (Previously Presented) The modulator of claim 1, where R³, R⁴, and R⁵ are each independently selected from the group consisting of -OR' and hydrogen.

7. (Previously Presented) The modulator of claim 1, where R³, R⁴, and R⁵ are each -OR', where R' is substituted C₁₋₈ alkyl.

8. (Canceled)

9. (Canceled)

10. (Cancelled)

11. (Cancelled)

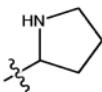
12. (Cancelled)

13. (Cancelled)

14. (Previously Presented) The modulator of claim 1, where Z is a substituted or unsubstituted group of the formula:



15. (Previously Presented) The modulator of claim 1, where Z is a substituted or unsubstituted group of the formula:

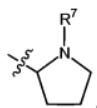


16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Currently Amended) The modulator of claim 1, where Z is a substituted or unsubstituted group of the formula:



where R⁷ is selected from the group consisting of hydrogen, -C(O)R', -CO₂R', -C(O)NR'R'', -SO₂R', unsubstituted or substituted C₁₋₁₀ alkyl, unsubstituted or substituted C₁₋₈ alkoxy, unsubstituted or substituted C₂₋₁₀ alkenyl, unsubstituted or substituted C₂₋₁₀ alkynyl, unsubstituted or substituted C₃₋₁₀ cycloalkyl, unsubstituted or substituted C₆₋₁₀ aryl, and C₆₋₁₀ C₆₋₁₀ aryloxy, unsubstituted or substituted 5 to 10 membered heteroaryl, and unsubstituted or substituted 3 to 10 membered heterocyclyl.

20. (Previously Presented) The modulator of claim 1, where R⁷ is substituted or unsubstituted C₁₋₁₀ alkyl, substituted or unsubstituted C₁₋₁₀ alkoxy, substituted or unsubstituted aryloxy, or substituted or unsubstituted C₃₋₁₀ cycloalkyl.

21. (Original) The modulator of claim 1, where n is 1, 2, or 3.

22. (Previously Presented) The modulator of claim 1, where m is 1 or 2, and each Y is a halogen.

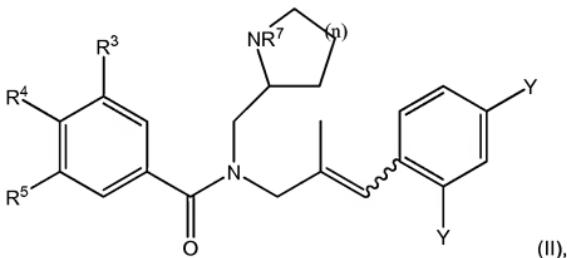
23. (Previously presented) The modulator of claim 1, where m is 0.

24. (Currently Amended) The modulator of claim 1, where substituted alkyl, substituted alkenyl, substituted alkynyl and substituted cycloalkyl can each independently be substituted 1 to 3 times with halogen, -OR', -NR'R'', -SR', -SiR'R''R'', -OC(O)R', -C(O)R', -CO₂R', -CONR'R'', -OC(O)NR'R'', -NR''C(O)R', -NR'-C(O)NR''R'', -NR''C(O)₂R', -S(O)R', -S(O)₂R', -S(O)₂NR'R'', -NR'S(O)₂R'', -CN, oxo (=O or -O-) or -NO₂, where R', R'' and R''' each are independently selected from the group consisting of hydrogen, halogen, unsubstituted C₁₋₈ alkyl, unsubstituted C₃₋₆ cycloalkyl, unsubstituted C₂₋₈ alkenyl, unsubstituted or C₂₋₈ alkynyl, and unsubstituted aryl, unsubstituted heteroaryl, unsubstituted or substituted heterocyclyl.

25. (Currently Amended) The modulator of claim 1, where substituted aryl and substituted heteroaryl can each independently be substituted 1 to 3 times with halogen, unsubstituted or substituted alkyl, unsubstituted or substituted alkenyl, unsubstituted or substituted alkynyl, unsubstituted or substituted cycloalkyl, -OR', oxo (=O or -O), -OC(O)R', -NR'R'', -SR', -R', -CN, -NO₂, -CO₂R', -CONR'R'', -C(O)R', -OC(O)NR'R'', -NR''C(O)R', -NR''C(O)₂R', -NR'-C(O)NR''R'', -NH-C(NH₂)=NH, -NR'C(NH₂)=NH, -NH-C(NH₂)=NR', -S(O)R', -S(O)₂R', -S(O)₂NR'R'', -NR'S(O)₂R'' and -N₃, where R', R'' and R''' are independently selected from the group consisting of hydrogen, halogen, unsubstituted C₁₋₈ alkyl, unsubstituted C₃₋₆ cycloalkyl, unsubstituted C₂₋₈ alkenyl, unsubstituted C₂₋₈ alkynyl, and unsubstituted or substituted aryl, unsubstituted heteroaryl, unsubstituted heterocyclyl.

26. (Currently Amended) The modulator of claim 1, where substituted heterocycl can be substituted 1 to 3 times with halogen, unsubstituted or substituted alkyl, unsubstituted or substituted alkenyl, unsubstituted or substituted alkynyl, unsubstituted or substituted cycloalkyl, -OR', oxo (=O or -O), -OC(O)R', -NR'R'', -SR', -R', -CN, -NO₂, -OC(O)NR'R'', -NR''C(O)R', -NR''C(O)₂R', -NR'-C(O)NR''R'', -NH-C(NH₂)=NH, -NR'C(NH₂)=NH, -NH-C(NH₂)=NR', -S(O)R', -S(O)₂NR'R'', -NR'S(O)₂R'' and -N₃, where R', R'' and R''' are independently selected from the group consisting of hydrogen, halogen, unsubstituted C₁₋₈ alkyl, unsubstituted or C₃₋₆ cycloalkyl, unsubstituted C₂₋₈ alkenyl, unsubstituted C₂₋₈ alkynyl, and unsubstituted aryl, unsubstituted heteroaryl, unsubstituted heterocyclyl.

27. (Currently Amended) A modulator having the structure (II):



where n=0-4, n=1;

where each Y is independently hydrogen or halogen;

R³, R⁴, and R⁵ are each independently R³, R⁴, and R⁵ are each independently selected from the group consisting of hydrogen, halogen, and -OR';

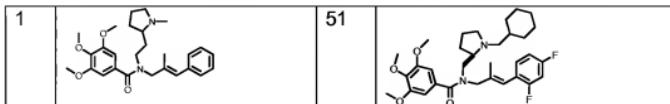
or any two of R³, R⁴, and R⁵, together with the atoms which they substituted, form unsubstituted or substituted 3 to 10 membered heterocyclyl; and

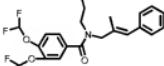
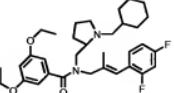
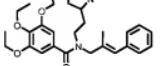
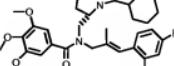
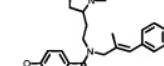
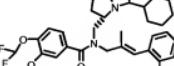
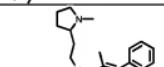
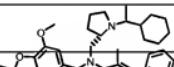
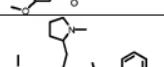
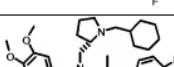
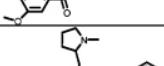
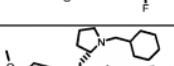
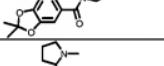
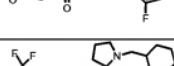
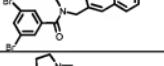
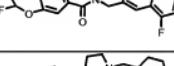
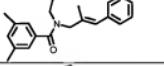
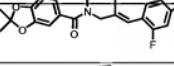
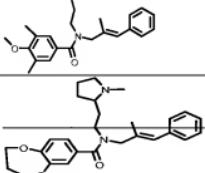
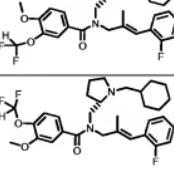
R⁷ is selected from the group consisting of hydrogen, -C(O)R', -CO₂R', -C(O)NR'R'', -SO₂R', unsubstituted or substituted C₁₋₈ alkyl (optionally C₁₋₈ alkoxyalkyloxy, CH₂CH₂OCH₂CH₂OMe)alkyl, unsubstituted or substituted C₂₋₈ alkenyl, unsubstituted or substituted C₂₋₈ alkynyl, unsubstituted or substituted C₃₋₈ cycloalkyl, and unsubstituted or substituted C₆₋₁₀ aryl, unsubstituted or substituted 5 to 10 membered heteroaryl, and unsubstituted or substituted 3 to 10 membered heterocyclyl, where each R', R'' and R''' are each independently from the group consisting of: hydrogen, halogen, unsubstituted or substituted C₁₋₈ alkyl, and unsubstituted or substituted C₆₋₁₀ aryl.

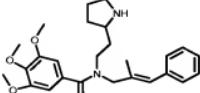
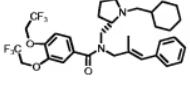
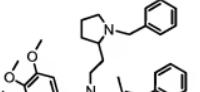
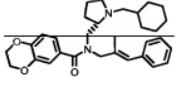
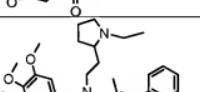
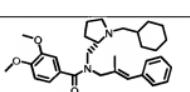
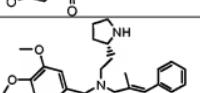
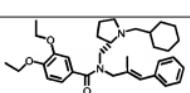
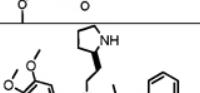
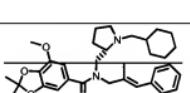
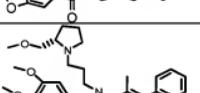
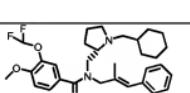
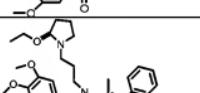
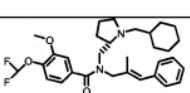
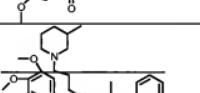
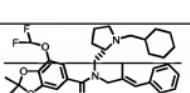
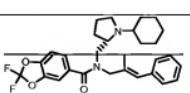
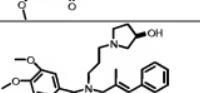
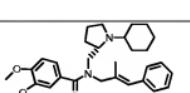
28. (Previously Presented) The modulator of claim 27, where R⁷ is C₁₋₈ alkoxyalkyloxy.

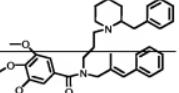
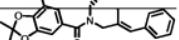
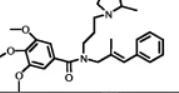
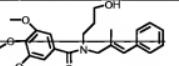
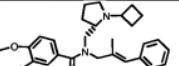
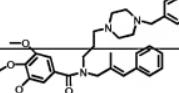
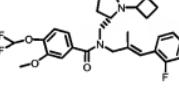
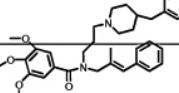
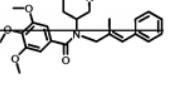
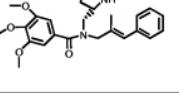
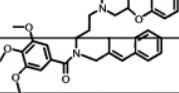
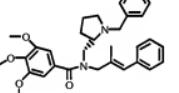
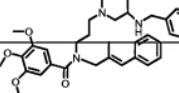
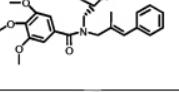
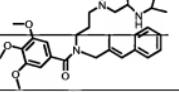
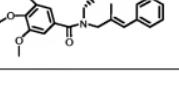
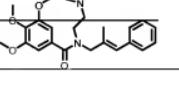
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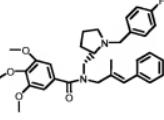
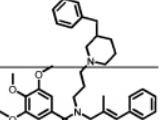
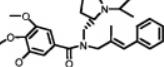
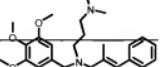
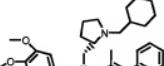
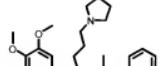
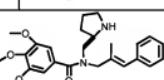
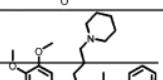
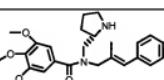
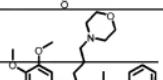
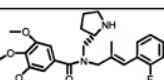
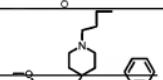
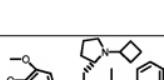
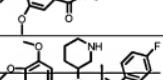
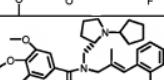
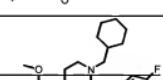
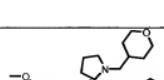
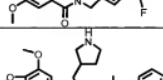
30. (Currently Amended) A modulator comprising one of the following formulae:



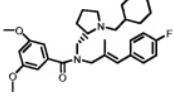
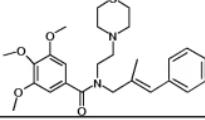
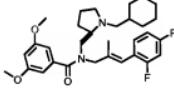
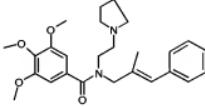
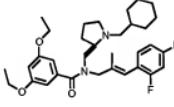
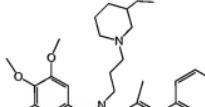
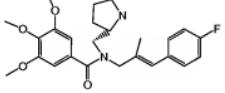
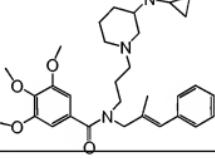
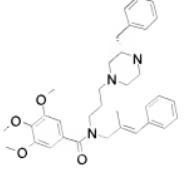
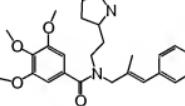
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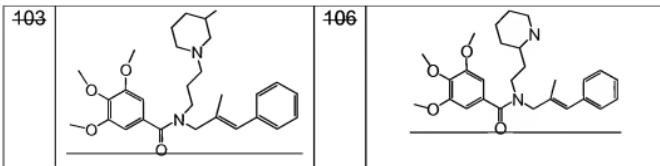
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31. (Previously Presented) A pharmaceutical composition comprising the modulator of claim 1 and a pharmaceutically acceptable carrier.

32. (Original) A pharmaceutical composition comprising the modulator of claim 27 and a pharmaceutically acceptable carrier.

33. (Withdrawn) A pharmaceutical composition comprising the modulator of claim 30 and a pharmaceutically acceptable carrier.

34. (Canceled)

35. (Withdrawn-Currently Amended) A method of inhibiting the binding of chemokines I-TAC and/or SDF-1 to a CCXCKR2 receptor, comprising contacting the composition of claim 34 33 with a cell that expresses the CCXCKR2 receptor for a time sufficient to inhibit the binding of the chemokines to the CCXCKR2 receptor.

36. (Withdrawn) A method of inhibiting the binding of chemokines I-TAC and/or SDF-1 to a CCXCKR2 receptor, comprising contacting the modulator of claim 1

with a cell that expresses the CCXCKR2 receptor for a time sufficient to inhibit the binding of the chemokines to the CCXCKR2 receptor.

37. (Withdrawn-Currently Amended) A method of treating cancer, comprising administering a therapeutically effective amount of the composition of claim 34 33 to a cancer patient for a time sufficient to treat the cancer.

38. (Withdrawn) A method of treating cancer, comprising administering a therapeutically effective amount of the modulator of claim 1 to a cancer patient for a time sufficient to treat the cancer.